Application has no additional information concerning the publication dates if any, of the references cited in the Information Disclosure Statement.

Applicant has invented an apparatus for preparing a fully cooked and frozen boned pork product which includes a searing oven at a high temperature cooking station for braising and charriing the boned pork product using radiant heat. The apparatus also includes a dual box, spiral steam cooker at a low temperature cooking station for cooking the boned pork product using steam to yield a fully-cooked, boned pork product. The apparatus further includes a freezer at a freezer station for freezing the fully-cooked, boned pork product. A first conveyor belt is disposed between the searing oven and the steam cooker and serves to mechanically transport the boned pork product from the high temperature cooking station to the low temperature cooking station. A second conveyor belt is disposed between the steam cooker and the freezer and serves to mechanically transport the fully-cooked, boned pork product from said low temperature cooking station to said freezer station. Together, first and second conveyor belts continuously and mechanically feed the product through the apparatus. In use, the first conveyor belt advances the boned pork product through the searing oven which braises and chars the product using radiant heat. Then, the first conveyor belt further advances the product into the dual box, spiral steam cooker which fully cooks the product. The steam cooker advances the fully-cooked product onto the second conveyor belt which, in turn, advances the product into the freezer. The freezer chills the product for distribution purposes. The apparatus further includes a marination device for marinating the product before it passes through the searing oven and a batter station for applying grease or a glaze solution to the product after it is steamed and before it is frozen.

As will hereinafter be explained in detail, the references cited by the Examiner in the rejections fail to teach, disclose or suggest applicant's claimed invention, as amended.

Claim 18 has been amended to overcome the 35 USC 112, second paragraph, rejection. Withdrawal of the 35 USC 112 second paragraph rejection is respectfully urged.

Claims 5-12 and 16-18 are rejected under 35 USC 103(a) as being unpatentable over Liebermann [Pat. No. 5,189,948] in view of Radiant Wall Oven and Dagerskog et al [Pat. No. 4,565,704].

In support of the rejection the Examiner stated that Liebermann teaches a method of cooking meat by preheating the meat at a first station (Fig. 1 #38), applying infrared radiant heat at a searing station in order to char the meat (Figure 1, #340), applying steam to the meat at a second station in order to fully cook it (Figure 1, #10), cooling the cooked and charred meat at a third station (Figure 1, #42), transporting the product between the stations with a conveyor belt (Figure 1, #16), applying radiant heat at 1500-1700°F (column 6, line 14), and the steam being up to 205°F (column 4, line 60). Liebermann does not teach the first station being infrared heating, the meat being boned pork, separate conveyors, the infrared heating lasting for 1.5-1.75 minutes, and the steam cooking lasting for two hours. Radiant Wall Oven [RWO] teaches a method of heating food in a first browning station which employs 1500° radiant heat, a second station which employs a steam oven, and separate conveyors for each station (illustration). Dagerskog et al teach a method of cooking pork chops (column 3, line 16) with infrared heat. It would have been obvious to one of ordinary skill in the art to incorporate the pork chops of Dagerskog et al into the invention of Liebermann et al since both are directed to methods of cooking meat, since Liebermann et al already included infrared heating (Figure 1, # 40) and the use of

meat in general (column 1, line 11), and since boned meats were commonly cooked with infrared heat as shown by Dagerskog et al. (column 3, line 16). It would have been obvious to one of ordinary skill in the art to incorporate the first station infrared heating of RWO into the invention of Liebermann et al since both are directed to methods of cooking, since Liebermann et al already included a preheating first station (Figure 1, #38) as well as an infrared charring station (Figure 1, #40), since RWO teaches that foods were commonly browned with infrared heating before they were fully cooked (illustration), and since placing the infrared heating of Liebermann et al at the first station would have provided the preheating while simultaneously eliminating the need for a microwave station and thus provided a savings in cost and space. It would have been obvious to one of ordinary skill in the art to incorporate the separate conveyors of RWO into the invention of Liebermann et al since both are directed to cooking methods, since Liebermann et al already possessed multiple statons connected by a conveyor (Figure 1, #16), and since the separate conveyors of RWO would have provided more flexibility by permitting the replacement of a station, for maintenance or cleaning, without the need to shut down the entire process. It would hav been obvious to one of ordinary skill in the art to steam for two hours and heat with infrared r4adiation for 1, 5-1.75 minutes in the invention of Liebermann et al since Liebermann et al already included steam heating to provide full-cooking and infrared heating to provide a charring effect (Figure 1, #10 & 40) but does not recite any preferred treatment times, since treatment times such as these were commonly used, and since the treatment times would have been varied during the course of normal experimentation and optimization due to such factors as the size of the meat product, the desired degree of cooking and charring, and type of meat to name but a few examples.

As will be described further in detail below, Liebermann in view of Radiant Wall Oven and Dagerskog does not teach, disclose or suggest applicant's claimed invention.

With respect to claim 5, as amended, applicant claims a method for preparing a boned pork product comprising the steps of, inter alia, applying radiant infrared heat to the boned pork product until the boned pork product is braised and charred but not fully-cooked, then applying steam to the braised and charred but not fully-cooked boned pork product until the braised and charred but not fully-cooked boned pork product is fully-cooked, and then cooling the fully-cooked pork product.

Liebermann discloses a completely different method of cooking meat. The method includes raising the temperature of the meat with a microwave processor 38, then heating the meat in a vapor chamber for a period of time, then momentarily exposing the meat to infrared radiation, then immersing the meat in a cold water bath, and then flash freezing the meat.

Applicant's method does not involve exposing the meat to infrared radiation after it is passed through a vapor chamber but rather involves exposing the meat to infrared radiation and then passing the meat through a steamer. Thus, the order of infrared heating and steaming is reversed in Liebermann. Also, applicant does not microwave the meat before it is IR heated or steamed.

RWO shows a system where meat is passed first through a radiant wall oven and then a multi-pass steam oven. The system shown does not specify the type of meat or any time intervals for the IR heating or steaming.

Dagerskog discloses a method of contact frying a foodstuff in which infrared heat is used to heat a conveyor belt on which the foodstuff is fried. The method in Dakerskaag

does not involve heating the foodstuff itself with infrared heat, but rather heating the conveyor belt that is used for contact frying the foodstuff.

Dagerskag clearly does not provide a basis for using Liebermann to cook pork chops in an infrared oven since Dakerskag is not cooking the meat itself with IR heat but rather is only heating the conveyor belt with IR heat that is used to fry the foodstuff. Furthermore, as noted above, the IR heating and steaming are reversed in Liebermann.

There is no basis for substituting the radiant wall oven on RWO for the microwave oven 38 in Liebermann since it would completely change the cooking method disclosed in Liebermann and would amongst other things involve IR heating the product twice, once before it is steamed and then the second time after it is steamed.

Claims 7-12, 16 and 17 are deemed allowable at least in view of their dependency on claim 5.

Claim 18 is deemed allowable for the same reasons as noted above regarding claim 5.

The rejection of claim 19 under 35 USC 103(a) as unpatentable over Liebermann in view of RWO and Dagerskog and Mauer et al is respectfully traversed.

The addition of Mauer et al for its teaching of marinating the meat does not overcome the basic shortcomings noted above in combining Liebermann with RWO and Dagerskog. In addition, applicant is not marinating the product before it goes to the steamer, but rather, before it passes through the radiant wall oven.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is required for an extension of time under 37 C.F.R. 1.136 that is not

accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on 6-18-03.

Irving M. Kriegsman

Marked-Up Abstract

An apparatus for preparing a boned pork product includes a searing oven at a high temperature cooking station for braising and charring the boned pork product using radiant heat. The apparatus also includes a dual box, spiral steam cooker at a low temperature cooking station for cooking the boned pork product using steam to yield a fully-cooked, boned pork product. The apparatus further includes a freezer at a freezer station for freezing the fully-cooked, boned pork product. A first conveyor belt is disposed between the searing oven and the steam cooker and serves to mechanically transport the boned pork product from the high temperature cooking station to the low temperature cooking station. A second conveyor belt is disposed between the steam cooker and the freezer and serves to mechanically transport the fully-cooked, boned pork product from said low temperature cooking station to said freezer station. [Together, first and second conveyor belts continuously and mechanically feed the product through the apparatus. In use, the first conveyor belt advances the boned pork product through the searing oven which braises and chars the product using radiant heat. The first conveyor belt further advances the product into the dual box, spiral steam cooker which fully cooks the product. The steam cooker advances the fully cooked product onto the second conveyor belt which, in turn, advances the product into the freezer. The freezer chills the product for distribution purposes.]

MARKED-UP AMENDED CLAIMS 5, 18 and 19

5. (Three times Amended) A method for preparing a fully-cooked boned pork product comprising the steps of:

(a)[.] applying radiant infrared heat to the boned pork product at a first [cooking] station until the boned pork product is braised and charred [but not fully-cooked], then

(b)[.] applying steam to the braised and charred [but not fully-cooked] boned pork product at a second [cooking] station until the braised and charred [but not fully-cooked] boned pork product is fully-cooked, and then

(c)[.] cooling the fully-cooked boned pork product at a third station.

18. (Amended) A method for preparing a fully-cooked and frozen boned pork product comprising the steps of:

(a)[.] [cooking] heating the boned pork product with radiant infrared heat until the boned pork product is braised and charred but [not fully-cooked], then

(b)[.] [cooking] steaming the braised and charred [but not fully-cooked] boned pork product [with steam] until the braised and charred [but not fully-cooked] boned pork product is fully-cooked, and then

(c)[.] [cooling] freezing the fully-cooked boned pork product.

19. (Amended) The method of claim 18 further comprising the step of marinating the boned pork product prior to [cooking] heating the boned pork product with radiant infrared heat.